

Notice of Allowability	Application No.	Applicant(s)	
	10/644,788	WATANABE, NOBORU	
	Examiner	Art Unit	
	Dana Ross	3722	


-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to Amendment filed October 14, 2004.
- 2. ☒ The allowed claim(s) is/are 1 and 2.
- 3. ☒ The drawings filed on 21 August 2003 are accepted by the Examiner.
- 4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 - 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)	
1. <input type="checkbox"/> Notice of References Cited (PTO-892)	5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____
3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____	7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment
4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
	9. <input type="checkbox"/> Other _____


ERICA CADOGAN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Brown on 8 November 2004.

The application has been amended as follows:

In the claims:

Claim 1 (Amended) A machine tool adapted to a workpiece on a workpiece spindle by non-self-aligning clamp means, the machine tool comprising:

a centering jig to be attached to a tool spindle; and

a run-out measuring device mounted on the tool spindle head for measuring a run-out of the workpiece resulting from the workpiece being off-center [off-center of the workpiece mounted on the workpiece spindle];

wherein, when the workpiece is to be fixed to the workpiece spindle by the clamp means, the centering jig is attached to the tool spindle, and the tool spindle is moved on the basis the run-out of the workpiece measured by the run-out measuring device to center the workpiece by the centering jig.

Claim 2 (Amended) A machine tool adapted to fix a workpiece to a non-self-aligning clamp means, the workpiece spindle by machine tool comprising:

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a tool magazine which accommodates a plurality of tools;

an automatic tool changer for exchanging a tool between the tool magazine and a tool spindle; and

run-out measuring device mounted on the tool spindle head for measuring a run-out of the workpiece resulting from the workpiece being off-center [off-center of the workpiece mounted on the workpiece spindle];

an automatic tool changer for exchanging a tool the tool magazine and a tool spindle; and

wherein a centering jig to be attached to the tool spindle is accommodated in the tool magazine;

wherein, when the workpiece is to be fixed to the workpiece spindle by the clamp means, the centering jig is taken out of the tool magazine and attached to the tool spindle by the automatic tool changer, and the tool spindle is moved on the basis of the run-out of the workpiece measured by the run-out measuring device to center the workpiece by the centering jig.

Allowable Subject Matter

2. Claims 1 and 2 are allowed.
3. The following is an examiner's statement of reasons for allowance: The prior art of record neither anticipates nor renders obvious a machine tool adapted to fix a workpiece on a workpiece spindle by non-self-aligning clamp means, specifically wherein the centering jig is attached to the tool spindle and a run-out measuring device for measuring run-out of the workpiece from the workpiece being off-center and the tool spindle moved on the basis of the

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run-out of the workpiece measured by the run-out measuring device to center the workpiece by the centering jig.

The closest prior art of record is US Pat. No. 4,118,871 (Kirkham) as is discussed in detail in the previous office action.

Kirkham teaches an inspection probe for measuring a dimension of the workpiece in a numerically controlled machine tool. The inspection probe makes contact with the surface of the workpiece by the relative movement between the inspection probe attached to a spindle by the tool holder and the workpiece fixed to a worktable, and the position of the tool holder and/or the workpiece is then recorded as an indication of the corresponding workpiece dimension.

Kirkham does not disclose a centering "jig" attached to the tool spindle, the tool spindle moved on the basis of the run-out of the workpiece measured by the run-out measuring device to center the workpiece by the centering jig.

Therefore Kirkham does not anticipate the claimed invention of either claim 1 or claim 2.

Furthermore, there is no prior art, either alone or in combination with Kirkham, that would render obvious the invention of claim 1 or claim 2, and no motivation found to modify Kirkham to obtain the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


dmr


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